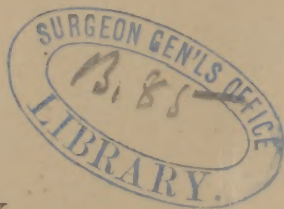


DULLES (C. W.)

SUPRA-PUBIC
LITHOTOMY.

BY
C. W. DULLES, M. D.,
PHILADELPHIA, PA.

[REPRINTED FROM THE NEW YORK MEDICAL JOURNAL, SEPT., 1878.]



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SUPRA-PUBIC LITHOTOMY.

IN a recent number of an American medical journal was an article upon median lithotomy, which contained the following sentence in regard to certain other methods: "The super-pubic cutting on the gripe and rectal have all been assigned to well-deserved oblivion, being preëminently unscientific and without advocates in this enlightened age."

It is not to criticise too sharply the sweeping statement quoted that this article is undertaken, but because the evident misapprehension in regard to the merits and status of one of the methods alluded to is not so rare as might be wished that I desire to make a few comments for the benefit of any who have not access to a better source of information. This desire is the natural outcome of an interest in supra-pubic lithotomy (which is no doubt meant by the term "super-pubic") that has grown with prolonged study of its history, and the investigation and analysis of more than five hundred cases. These—it may be said by way of explanation—have been gathered by examining the original records in very many works on surgery, and more than three thousand volumes of medical journals—English, German, French, and Italian—and an extensive correspondence.

It is not within the scope of this paper to present a detailed statement of the arguments in favor of the general adoption of this method of lithotomy; these may be found, by any one desiring to look the matter up, pretty fully stated in an article on

supra-pubic lithotomy in *The American Journal of the Medical Sciences*, for July, 1875, and another in the number for April, 1878. But a few points may be here touched upon, in the hope that their consideration will prevent such hasty generalizations as have called them out in this instance.

And, first, in regard to the merits of supra-pubic lithotomy. So far from being "preëminently unscientific," this method has more to recommend it upon purely anatomical grounds than any other, being, when properly carried out, exceedingly simple, easy of execution, free from hazardous complications, and unlikely to be followed by grave consecutive lesions. But this presupposes—what is not so common as might be imagined—an accurate acquaintance with the anatomy of the parts, and the best way of operating. It implies the correction of some wide-spread erroneous impressions in regard to the relation of the peritonæum to the bladder and the abdominal walls, in regard to the necessity of distending the bladder by injection, and in regard to the requirements to secure suitable drainage after the operation; erroneous impressions which may be found even in some of the most recent writings upon this subject.

The operation in its simplest form is conducted as follows: the skin just above the pubes and over the linea alba is incised to the extent of a few inches, and an easy dissection brings one down to the region of the bladder. This is now pushed up on the end of a sound, passed through the urethra, and secured with a tenaculum. It is then incised to a proper extent and the calculus removed with fingers or forceps. After which the wound should be covered with a light absorbent and stimulating dressing, the patient put to bed, and the subsequent treatment conducted on general principles.

The question may suggest itself to the reader, as it has often been asked of the writer: "But how does one avoid cutting the peritoneum?" To this there can be but one brief answer: "Exactly as one avoids cutting the carotid in operations on the neck; that is, by knowing where it is, and keeping it out of harm's way." Just here is seen the need for *accurate* anatomical knowledge. This would prevent the groundless fear that there is great danger to the peritonæum in this opera-

tion. As is said in Holmes's "Surgery," "the wounding of the peritonæum must be regarded as a failure in anatomical manipulation;" and it may be asserted without hesitation that the properly-informed surgeon need have little apprehension of so rare an accident. It has occurred, in five hundred and fifteen cases, only fourteen times, nine of which were before the days of anaesthetics, two of the remaining five were through carelessness; and, with all, only four of the patients died.

From this it must not be imagined that the surgeon can act as if there were no peritonæum. That has been the cause of most of the accidents. Though he should not have needless dread, he should use proper caution. The peritonæum may be encountered; it should be looked for, and, if met, gently pressed out of the way.

Another question which is often asked is: "Does not the bladder have to be distended with an injection?" To this the answer—briefer than that to the former question—is, "*No!*" The simplest, and a perfectly satisfactory way to fix it for incision, is to raise it up from within, on the end of a sound, and secure it with a tenaculum. Let any one try this on the cadaver, and he will see how easy a matter it is.¹

Then, in regard to the treatment of the wound: this may be as simple as described above, having good assurance of success, founded upon the result of cases that have been thus treated. So, too, of abstaining from any interference in the subsequent drainage of urine and discharges. There are plenty of cases to demonstrate that Nature is quite competent, in ordinary, to take care of these, and I happen to have just received accounts of two operations, done by Dr. Bahnson, of Salem, North Carolina, where he used no sutures and no catheter after the operation, letting Nature take her own course, with the result of recovery in one case in sixteen, in the other in eighteen days.

I have thus described what I believe to be the simplest method of performing this operation; but, at the same time, I think the safety of the patient would be much more assured

¹ It would be well for any one who thinks of employing this method to practise it, if possible, on the cadaver first.

by the adoption of certain modifications, which have been elsewhere suggested.¹

And now let us look at the dangers which have been supposed to constitute the great obstacle to the general adoption of the supra-pubic operation. These are two—peritonitis and urinary infiltration, which are over and over again said to constitute hazards to which the surgeon should not subject his patient. Yet, that they are really to be dreaded, as one might suppose by such warnings, is utterly unsupported by facts; more than this, it is overwhelmingly disproved by facts. As is said in Pitha and Billroth's "*Handbuch der Chirurgie*" (Bd. III., 2^{te} Abth., Seite 111): "From all this it is seen that, in general, the pretended danger of urinary infiltration can of itself furnish no contraindication at all to supra-pubic lithotomy." And, again: "Though further it was insisted that in supra-pubic lithotomy the peritonæum was more imperiled than in any other method, yet this danger also was unreasonably exaggerated."

It may be objected to all this, that nevertheless the books give the mortality after supra-pubic as much higher than after lateral lithotomy. True enough; but that is a superficial judgment which rests upon this aspect of the case alone. One must go deeper to get at a correct estimate of this or any other operation. If this be done, we see that supra-pubic lithotomy has labored under the greatest disadvantages. It has been neglected in teaching and in practice, it has been avoided in the best cases, and had recourse to only in the most desperate and hopeless. The subject has been surrounded with, it must be plainly said, ignorance and prejudice; not ill-will, of course, but just what these words mean, want of correct information and preconceived judgments. In this way it has been employed, amid the host of stone cases, say, five or six hundred times, of which we have now access to only about five hundred, on analyzing which we discover that they comprise those where one would least expect success; operations done upon the oldest patients, for the largest calculi, and often when an immediately previous attempt at perineal li-

¹ *American Journal of Medical Sciences*, April, 1878, p. 397.

thotomy had failed. Indeed, its disadvantages have been very like those under which tracheotomy labors at the present day. Yet, with all this, the results, taking all cases together, have been almost half as good as the highly-favored lateral method, and for large calculi much better.

If, then, these results have been, *under the circumstances*, so good, and if the fact that they have not been better is attributable, not to anything in the method itself, but to its circumstances, it may well be demanded of one who advocates it to show that under more favorable circumstances it may be expected to compare well with other methods. This can, I believe, be shown quite conclusively.

There is, in *The American Journal of the Medical Sciences*, for April, 1878 (p. 400), a table containing the cases of supra-pubic lithotomy occurring during the past ten years then known to me, to which may be now added three more which have since come to hand. On looking over these we find, of the entire twenty-three, but two were followed by a fatal result, in neither of which can it be charged to the method itself. And, even if it could, we would still have a death ratio of one in eleven and a half, which is much better than the average in lateral lithotomy, according to the most recent statistics: a showing as good as the most strenuous opposers of supra-pubic lithotomy could demand, or its most ardent advocates—for it is not “without advocates in this enlightened age”—could desire.

It may be asked: “If this be all true, why is the general opinion so unfavorable to the method?” It is plain enough to one who has had opportunity to study the subject carefully. As far back as the time of Cheselden carelessness and unjustifiable violence led to accidents which horrified those who would otherwise have adopted and perfected it. Coming down the line of history we find that it was not freed from the trammels of ignorance and rudeness until the present century was well on its way, and lateral lithotomy had secured an almost impregnable position. There was, then, ground enough for the early warnings against it as a dangerous method, and there can be but little wonder that these were repeated from author to author, without any material modification. So far

there can be little objection to this course, for there was nothing to stand against it. But there is no reason, and there is no right, in a continuance of the old way of treating the subject now. It will no longer do for surgical writers, however distinguished in general, to repeat without scrutiny the old charges against supra-pubic lithotomy, and add the weight of their authority to errors in regard to a method of which they have had no personal experience, and, perhaps, no opportunity for observation or investigation.

As an evidence of the appropriateness of such remarks, let it be noted that until very recently English and American writers have known no better basis for their opinions than the hastily collated and imperfect table of one hundred and four cases which Humphrey published in 1850,¹ being apparently entirely unaware of the existence of a masterly monograph by Günther, of Leipzig, published the very next year, and containing a history and careful analysis of two hundred and sixty cases.² The latter was, of course, accessible to German surgeons, and consequently we find they have a very different estimate of this method from that of our English-speaking brethren, with their meagre supply of facts. One will get no idea from Bruns, Roser, Bardeleben, Langenbeck, or Pitha and Billroth that this operation is "preëminently unscientific." Their views, founded upon Günther's two hundred and sixty cases, are amply sustained by examination of the five hundred and fifteen upon which the present article rests. Indeed, nothing is more evident, in going over the history of the operation, than that the conviction of its value has ever been in direct ratio to the extent and thoroughness of the research of each investigator.

It is not surprising, then, that, as correct data are presented to the world, we find the interest in it growing and spreading. The investigations of the writer, and the kindness with which his previous requests for communication of facts in regard to this method have been treated, place him

¹ G. M. Humphrey, "A Case of the High Operation of Lithotomy," *Transactions of Provincial Medical and Surgical Association*, vol. xvii., London, 1850.

² G. B. Günther, "Der hohe Steinschnitt," Leipzig, 1850.

in a position to state that supra-pubic lithotomy is at present very far from a "well-deserved oblivion." It commands more attention and has more friends and advocates now—in this country especially, but also in Europe—than ever since the days of Douglas, Cheselden, Côme, and Souberbielle.

It is hardly likely to be adopted by men whose early education has led them to regard it as only to be chosen in cases when no other method can be employed, and whose subsequent career leads them to be so satisfied with the lateral operation as to desire no change; but there are not a few who, under the more recent presentation of the subject, are coming to see that it offers possibilities far better than has been heretofore believed, and will not hesitate to give it trial as occasion offers. Some have already done so, and without exception been thereby more satisfied than before that the method should be assigned a position *at least* equal to that of any other.

It may be an over-sanguine belief that the supra-pubic operation will some day be the most generally employed, and the blind thrusts into the perineal tissues, the prostate gland, the seminal vesicles, be abandoned for that method in which no important structure is endangered, and every step can be followed with the eye; but this belief is held in the world, notwithstanding the grave sentence which stands at the head of this paper. As Franco wrote at the head of his "*Petit Traité*," in 1561, "*Il faut durer pour endurer*."

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